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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,128	12/17/2001	Durward I. Faries, JR.	1322.0040C	4172

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EXAMINER

WITCZAK, CATHERINE

ART UNIT	PAPER NUMBER
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3767

MAIL DATE	DELIVERY MODE
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12/02/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/016,128	Applicant(s) FARIES, ET AL.	
	Examiner CATHERINE N. WITCZAK	Art Unit 3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-23 and 51-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-23 and 51-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 17, 51, and 57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims include the limitation “enabling said intravenous fluid warming device to heat said fluid to said desired temperature within said range of 60°F - 160°F.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-19, 21, 23, 51-53, 55-59, 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augustine et al (US 2001/0009610) as modified by Mitsunaga et al (US 6,788,885) in further view of Ikegame et al (US 4,747,450).

Augustine et al. disclose in Figure 1 a fluid cassette comprising a fluid line tubing including an inlet (146) and an outlet (148) including connectors. Augustine et al disclose the claimed invention except for the quantity of tubing section providing a residence time enabling warming of the fluid to a desired

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temperature with the range of 60 –160 °F. Mitsunaga et al teach in columns 1, lines 23-25 and column 6, lines 39-43) that it is known to vary the length of tubing to achieve warming to a desired temperature range. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Augustine et al with varied tubing length to provide for warming of liquid in the tubing to a desired temperature, since such a modification would allow the device to provide sufficiently heated blood when treating patients.

Augustine et al in view of Mitsunaga et al disclose the claimed invention except for the fluid line tubing including a spiral section wherein the fluid flow direction within each tubing section is opposite the fluid flow direction with each adjacent tubing section. Ikegame et al teach in column 4, lines 19-24 that it is known to use a spiral design with reserved fluid flow in adjacent tubing section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Augustine et al in view of Mitsunaga et al, since such a modification would allow for even temperature distribution without the creation of thermal stress.

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Augustine et al as modified by Mitsunaga et al in further view of Ikegame et al as applied to claims 17 and 21 above, and further in view of Barker (US 4,476,877).

Augustine et al as modified by Mitsunaga et al in further view of Ikegame et al disclose the claimed invention except for the fitting including a thermally conductive member disposed within the fitting and in direct contact with the fluid, the thermally conductive member receiving the temperature sensor to measure temperature of the fluid. Barker discloses in Figures 1 and 2 that it is known to use a thermally conductive member (28) disposed within a fitting (22) and in direct contact with the fluid (see Figure 2), the thermally conductive member receiving the temperature sensor (32) to measure temperature of the fluid. It would have been obvious to one having ordinary skill in the art at the time of the invention

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to modify the device of Augustine et al as modified by Mitsunaga et al in further view of Ikegame et al with the teachings of Barker since the modification would provide the device with a system providing a signal corresponding accurately to the temperature of fluid which also allows also for the fitting to be disposable while allowing the sensor to be reused (see column 1, lines 64 – column 2, line 5).

Allowable Subject Matter

4. Claims 20, 54 and 60 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CATHERINE N. WITCZAK whose telephone number is (571)272-7179. The examiner can normally be reached on Monday through Friday, 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Catherine N Witzak/

Examiner, Art Unit 3767

/KEVIN C. SIRMONS/

Supervisory Patent Examiner, Art Unit 3767